

Amendments to the Specification:

Please replace paragraph [0004] with the following amended paragraph:

[0004] When the magnetic head writes data onto the magnetic disk, a specified current flows to the write head to magnetize a magnetic film that is formed on the magnetic disk. When data is written on the magnetic disk, new data frequently overwrites the existing data. The overwrite characteristic, which indicates whether an overwrite is properly performed, depends on the current value for a data write performed by the write head (write current value). It is known that when the write current value is small, the overwrite characteristic deteriorates because the magnetic pattern of previously written data cannot be adequately remagnetized. If, on the other hand, the write current value is excessively great, a squeeze problem arises in remagnetizing the magnetic pattern of an adjacent track. Further, the read signal characteristics may frequently deteriorate depending on the write current value. It is therefore necessary that the write current value be properly set.

Please replace paragraph [0047] with the following amended paragraph:

[0047] FIG. 3(b) shows the details of overshoot circuit 38 (39). ~~Overshoot circuit 38~~
circuit 38 (39) is formed by series-connecting switch 48 to a circuit that is formed by series-connecting resistors 41, 43, and 45 to switches 42, 44, and 46, respectively, and parallel-connecting these series-connected resistor-switch pairs and resistor 47. When the resistance value of resistor 47 is R_1 , resistor 41 is set to a resistance value of $R_1/2$; resistor 43 is set to a resistance value of $R_1/4$; and resistor 45 is set to a resistance value of $R_1/8$. Switches 42, 44, and 46 for overshoot circuits 38 and 39 are either turned ON or OFF in order to minutely determine the data write initial peak current (so that the switching speed simultaneously varies), which will be described later. Switch 48 is turned ON only for the period during which overshoot circuit 38 or 39 operates (the period of time required for electrical current direction reversal).

Please replace paragraph [0061] with the following amended paragraph:

[0061] In the present embodiment, the negative power supply voltage -V_{ee} to be supplied to head amplifier 12 is adjusted as needed in accordance with the temperature T surrounding HDD 1 and without sacrificing the overwrite characteristic. This reduces power consumption because no extra power is supplied to head amplifier 12. Further, the reduction in power consumption decreases the amount of heat released from the head amplifier 12, thereby lowering the junction temperature of head amplifier 12 with a view toward reliability enhancement.